

\* Revised

**Project Greenhouse Gas Emissions and Reductions Summary - New Wineries**

The Napa County Climate Action Plan requires that staff calculate for all projects the GHG emissions in 2020 of all discretionary projects assuming "business as usual" (BAU) conditions, and that applicants reduce those emissions by 38%. The required 38% reduction in GHG emissions can be achieved through a combination of state level policies and programs, County level policies and programs, on-site project level actions and contributions to the Napa County GHG reduction fund. This sheet contains results of calculations completed to demonstrate that the project has achieved the required 38% reduction target in 2020.

<b>Project Name:</b>	15 Chateau Lane P12-001585	<b>Target Build-Out Year:</b>	2020
<b>Project Summary</b>	new 20,000 gallon per year winery with: A 1,728 square foot existing structure, a 10,000 square foot cave; Three full-time and one part-time employees; Nine parking spaces; Tours and Tastings 36 people per week; A marketing plan that includes twelve events per year with a maximum of 25 persons, and two events per year with a maximum of 80 persons at each event.; Installation of a new septic system and wastewater process system. 90% of electrical demand provided by solar panels (18.6 K kilowatt hours)		

(MT CO2e)

**A. PROJECT'S BAU EMISSIONS IN 2020**

Energy Use, Mobile, Area, Water and Wastewater, Solid Waste  
 Fugitive Emissions from Winery Wastewater if applicable  
 Land Use Change (one time loss in carbon stock + loss in sequestration)

89
89
-
-

**B. PROJECT'S TARGET EMISSIONS IN 2020**

72% of BAU Emissions (BAU - 38%)

64
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**C. PROJECT'S TARGET EMISSIONS REDUCTIONS IN 2020**

BAU Emissions - Target Emissions (A-B)

<del>25</del> 34
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**D. GHG REDUCTIONS FROM STATE LEVEL PROGRAMS**

Energy  
 Mobile  
 Other  
 Land Use Change

4
0
3
TBD
-

**E. GHG REDUCTIONS FROM LOCAL PROGRAMS AND PROJECT LEVEL ACTIONS**

Energy  
 Mobile  
 Other

35
35
(0)
-
-

Total Stock at 100 years (Reference):

Land Use Change

**G. TOTAL GHG REDUCTIONS IDENTIFIED**

State + Local + Project (D + E); Compare to Box C above

38
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**H. PURCHASED IN THE NAPA GHG REDUCTION BANK**

Balance of reductions needed to reach target (C-G)

<del>(14)</del> (4)
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# Checklist of Voluntary Greenhouse Gas Emission Reduction Measures



A Tradition of Stewardship  
A Commitment to Service

An addendum to the Entitlement Application and a supplement for Initial Studies as required by CEQA

PROJECT NAME	Chateau Lane Winery
PROJECT ADDRESS	15 Chateau Lane, Napa, CA 94558
APPLICANT	Joseph Pierret
CONTACT INFO	jpierret@sbcglobal. net 408-206-1624
	email <span style="margin-left: 100px;">phone</span>

- |   | yes                      | no                                  | I don't know             |
|---|--------------------------|-------------------------------------|--------------------------|
| 1 Have you designed to U.S.G.B.C.™ LEED™ or Build It Green™ standards?<br>If yes, please include a copy of their required spreadsheets. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2 Do you have an integrated design team?<br>if yes, please list: _____  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**3 SITE DESIGN**

- |   |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 3.1 Does your design encourage community gathering and is it pedestrian friendly?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3.2 Are you building on existing disturbed areas?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3.3 Landscape Design  |                                     |                                     |                                     |
| 3.31 native plants?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3.32 drought tolerant plants?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3.33 Pierce Disease resistant planting?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3.34 Fire resistant planting?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3.35 Are you restoring open space and/or habitat?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3.36 Are you harvesting rain water on site?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3.37 planting large trees to act as carbon sinks?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3.38 using permeable paving materials for drive access and walking surfaces?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3.4 Does your parking lot include bicycle parking?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3.5 Do you have on-site waste water disposal?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3.6 Do have post-construction stormwater on site detention/filtration methods designed?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3.7 Have you designed in harmony with existing natural features, such as preserving existing trees or rock outcroppings?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3.8 Does the project minimize the amount of site disturbance, such as minimizing grading and/or using the existing topography in the overall site design (such as cave design)? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3.9 Is the structure designed to take advantage of natural cooling and passive solar aspects?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |

**4 ENERGY PRODUCTION & EFFICIENCY**

- |   |                                     |                                     |                          |
|---|-------------------------------------|-------------------------------------|--------------------------|
| 4.1 Does your facility use energy produced on site?<br>If yes, please explain the size, location, and percentage of off-set:<br>12.6kW solar panels installed on ground Jan 2009. 89% offset of kWh, 97% offset of elec bill. Panels produce 18.6MWh per year & annual usage is 20.9MWh | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| 4.2 Does the design include thermal mass within the walls and/or floors?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| 4.3 Do you intend to commission the performance of the building after it is built to ensure it performs as designed?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4.4 Will your plans for construction include:   |                                     |                                     |                          |
| 4.41 High density insulation above Title 24 standards?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4.42 Zones for heating and cooling to provide for maximum efficiency?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| 4.43 Energy Star™ or ultra energy efficient appliances?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| 4.44 A "cool" (lightly colored or reflective) or a permeable/living roof?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4.45 Timers/time-outs installed on lights (such as the bathrooms)?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| If yes, please explain: <u>Bathrooms, offices &amp; lab will have motion sensor shut-off switches for lights.</u>   |                                     |                                     |                          |

**5 WATER CONSERVATION**

- |  |                                     |                                     |                                     |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| 5.1 Does your landscape include high-efficiency irrigation?                            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5.2 Does your landscape use zero potable water irrigation?                             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 5.3 Is your project in the vicinity to connect to the Napa Sanitation reclaimed water? | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5.4 Will your facility use recycled water?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5.41 If no, will you prepare for it by pre-installing dual pipes and/or purple lines?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5.5 Will your plans for construction include:  |                                     |                                     |                                     |
| 5.51 a meter to track your water usage?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5.52 ultra water efficient fixtures and appliances?                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5.53 a continuous hot water distribution method, such as an on-demand pump?            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5.54 a timer to insure that the systems are run only at night/early morning?           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

yes no I don't know

6 MATERIAL RECYCLING

6.1 Are you using reclaimed materials? 

	X	
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If yes, what and where: \_\_\_\_\_

6.2 Are you using recycled construction materials-

6.21 finish materials? 

	X	
--	---	--

6.22 aggregate/concrete road surfaces? 

		X
--	--	---

6.23 fly ash/slag in foundation? 

	X	
--	---	--

6.3 Will your contractor be required to recycle and reuse construction materials as part of your contract? 

		X
--	--	---

6.4 Does your facility provide access to recycle-

6.41 Kitchen recycling center? 

	X	
--	---	--

6.42 Recycling options at all trash cans? 

		X
--	--	---

6.43 Do you compost green waste? 

X		
---	--	--

6.44 Provide recycling options at special events? 

X		
---	--	--

7 NATURAL RESOURCES

7.1 Will you be using certified wood that is sustainably harvested in construction? 

		X
--	--	---

7.2 Will you be using regional (within 500 miles) building materials? 

		X
--	--	---

7.3 Will you be using rapidly renewable materials, such as bamboo? 

		X
--	--	---

7.4 Will you apply optimal value engineering (studs & rafters at 24" on center framing)? 

		X
--	--	---

7.5 Have you considered the life-cycle of the materials you chose? 

	X	
--	---	--

8 INDOOR AIR QUALITY

8.1 Will you be using low or no emitting finish and construction materials indoors-

8.11 Paint? 

		X
--	--	---

8.12 Adhesives and Sealants? 

		X
--	--	---

8.13 Flooring? 

		X
--	--	---

8.14 Framing systems? 

		X
--	--	---

8.15 Insulation? 

		X
--	--	---

8.2 Does the design allow for maximum ventilation? 

		X
--	--	---

8.3 Do you plan for a wood burning fireplace (US EPA Phase II certified)? 

	X	
--	---	--

8.4 Does your design include daylighting, such as skylights? 

	X	
--	---	--

9 TRANSPORTATION DEMAND MANAGEMENT

9.1 After your project is complete, will you offer your employees incentives to carpool, bike, or use transit? 

		X
--	--	---

9.2 After your project is complete, will you allow your employees to telecommute or have alternative work schedules? 

	X	
--	---	--

9.3 Does your project include design features that encourage alternatives modes of transportation, such as preferred parking for carpooling, ridesharing, electric vehicles? 

	X	
--	---	--

secured bicycle parking, safe bicycle access? 

	X	
--	---	--

loading zones for buses/large taxi services? 

	X	
--	---	--

9.4 How close is your facility to public transportation?  
2.7 miles

10 Are there any superior environmental/sustainable features of your project that should be noted?

Winery is in a cave, thus minimally altering the landscape, and Solar Panels provide 90% of projected electrical use.

11 What other studies or reports have you done as part of preparing this application?

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

12 If your project involves an addition or modification to an existing building, are you planning to improve energy conservation of existing space (such as insulation, new windows, HVAC, etc.)?

existing barn will require thermal insulation and HVAC upgrades.

13 Once your facility is in operation, will you:

13.1 calculate your greenhouse gas emissions? 

		X
--	--	---

13.2 implement a GHG reduction plan? 

		X
--	--	---

13.3 have a written plan to reduce your vehicle miles traveled of your operations and employee's commute? 

		X
--	--	---

14 Does your project provide for education of green/sustainable practices?

If yes, please describe: \_\_\_\_\_

15 Any comments, suggestions, or questions in regards to the County's efforts to reduce greenhouse gases?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Form filed out by: Joseph Pierret

Please feel free to include additional sheets of paper as necessary.



## Data Requisition of Operational Characteristics for Commercial, Residential, or Industrial Projects

The Napa County Climate Action Plan requires that staff calculate the GHG emissions of all discretionary projects assuming "business as usual" (BAU), and that applicants reduce those emissions by 38%. This checklist identifies the data needed to complete the required calculations and allows applicants to select the emissions reduction measures they wish to use. Applicants may retain consultants to prepare their own calculations if desired. Default calculations will be based on the URBEMIS and Bay Area Air Quality Management District's BGM model, as well as standard factors for vegetation removal and retention/replacement.

### Contact Information:

Name of project: PIERRET VINEYARDS
Project address & APN: 15 CHATEAU LANE, NAPA, CA 94558
Project contact name: JOSEPH PIERRET
Project contact e/mail: jpierret@sbcglobal.net
Project contact phone: (408) 206-1624

### Part A: Business As Usual (BAU)

#### 1. New construction or operations (or change in land use type)

Land Use Type	square feet	# of units	Total Daily Trips	# of employees
Dwelling unit				
Warehouse				
Light Industrial (winery production)	11728	2	16	3.5
High quality restaurant (tasting room)				
Retail				
Office				
Other (please explain)				
<i>Total</i>	11728	2	16	3.5

Refer to Table 3-1 of the BAAAQMD CEQA Guidelines (2011) for other precursor screening levels

#### 2. Site Development

Removal (One Time Emissions)	Acres removed	Acres planted
Vegetation type		
Coniferous Forest		
Oak Woodland		
Riparian Woodland		
Shrub		
Vineyard		
<i>Total acres of land</i>		
Site Improvements	Amount	Unit
Grading	16771	Square feet
Roads	0	Square feet
Parking	1359	Square feet
Hardscape (anything paved)	503	Square feet
Landscape	0	Square feet
<i>Total square footage of site improvements</i>	18639	
Size of wastewater lagoons	0	Square feet
Amount of groundwater	2571	Gallons per day



State of California  
Department of Water Resources  
A Commitment to Service

### Part B: Emission Reduction Measures

		amount	unit	yes	no
1	Are you a Napa Certified Winery?				x
2	Does the facility have alternative fuel vehicles in fleet?				x
3	If yes, what percentage of fleet?		%		
4	Has the facility installed renewable energy on-site since 2005, or does it intend to?		Solar Panels	x	
5	If yes, how much?	18600	KW hrs. 90% of expected usage		
6	Do you intend to build to Cal Green* Tier 2 standards?				x
7	Do you intend to build to Cal Green Tier 3 standards?				x
8	Do you have areas such as a cave, or natural cooling, passive solar that will exceed 2005 Title 24 standards? Explain: Cave _____			x	
9	If so, how many square feet?	10000	Sq. Ft.		
10	What is the percent reduction of 2005 Title 24 standards for that portion?		%		
11	If the project is a winery, does it propose any efficient equipment, such as gravity flow pumping?				x
12	If so, ho many annual kilowat hours saved?		KW hrs.		
13	Do you intend to recycle more than what the local landfill provides, if so what percentage of reduction? explain: _____		%		x
14	Does the project intend to restore degraded habitat?				x
15	If so, how many acres?		acres		
16	Does the landscape plan include the planting of more than 6 shade trees within 40 feet of the southside or 60 feet of the westside?				x
	If so, how many trees?		trees		
17	Will the project replace more than a 2:1 ratio of trees on site, and if so how many additional?		No trees to be removed		x
	What specie?				
17	Does the project connect to a municipal water source?				x
18	Will the project rely on an onsite well?			x	
19	How many gallons of water per day is dedicated to domestic water use?	450	g/day		
20	How many gallons of water per day is dedicated to landscape?	90	g/day		
21	Will the project connect to municipal sanitary sewer system?				x
22	Will the project have an on-site septic system?			x	



State of Louisiana  
A Constitution for the People

			YES	NO
23	If so, how big are the lagoons?	sq. ft.		x
24	Will the project have it's own treatment system? If so, explain: <u>On-site treatment and disposal of wastewater</u>		x	
25	Does your project have bicycle access and parking?			x
26	Does the employer have a employee transportation demand management plan with feasible commute incentives? If yes please provide example.			x
27	Does the employer sponsor a van/pool shuttle for visitors? If yes, what percentage of visitation will use it?	%		x
28	Is the project requesting a parking reduction, if yes what percentage?	%		x
30	Does the parking lot provide a charging station for electrical vehicles?			x
29	Other, Please explain: _____			